

Conclusion: Patient safety in theatre is of the upmost importance, especially in high risk procedures such as those found in neurosurgery. Simple interventions can be relatively inexpensive, quick to implement and can make a significant difference to patient safety.

0071: DE NOVO ARTERIOVENOUS MALFORMATION IN A 4 YEAR-OLD BOY WITH HEADACHE

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Aim: Arteriovenous malformations (AVM) have traditionally been thought of as congenital lesions but this model of pathogenesis does not account for those patients in which the AVM appears to have arisen de novo.

Methods: We describe the case of a 4 year-old boy who presented with headache; subsequent imaging demonstrated a Spetzler-Martin grade 3 AVM within the left superior temporal gyrus. However, this patient had previously undergone magnetic resonance brain imaging for investigation of seizures during the neonatal period, which demonstrated normal structural appearance.

Conclusion: We present a case of de novo AVM in a child without pre-existing cerebrovascular disease and discuss it in the context of recent advances in the understanding of AVMs.

0233: MANAGEMENT OF HEAD INJURIES PRESENTING TO A DISTRICT GENERAL HOSPITAL: COMPLIANCE WITH THE 2014 NATIONAL INSTITUTE FOR HEALTH AND CLINICAL EXCELLENCE (NICE) GUIDELINES

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Aim: A significant proportion of patients admitted with head injury suffer long term psychological and/or physical deficits. We aim to investigate our practice in managing head injuries at a district general hospital in accordance with the 2014 NICE guidelines.

Methods: We prospectively investigated patients that were admitted to hospital with head injuries over a 6-week period in 2014. We collected demographics and data relating to the timescale between presentation and assessment/imaging.

Results: Twenty patients were admitted over the study period. Of these, 50% were male. The most prevalent age group was above 80 years making up 50% of the total head injury admissions. Only 30% of these cases were clinically assessed within 15 minutes of presentation to A&E. In addition, only 45% of cases underwent CT imaging of the head within the recommended time. Cervical spine imaging was performed in all patients in whom this was required. However, this was performed within the recommended timeframe in only 15% of cases.

Conclusion: Compliance with NICE guidance for head injuries within our hospital was suboptimal. Lack of knowledge about the recent guidelines may have contributed to these findings. Raising staff awareness in this regard will likely improve our management of head injuries.

0393: PRIMARY RESECTION OF MALIGNANT INTRACRANIAL NEOPLASMS CONVEYS A FUNCTIONAL BENEFIT IN A SELECT PATIENT COHORT

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Aim: Treatment and follow up strategies for high-grade cerebral neoplasms aim to increase survival, whilst maximising patient's functional capability and quality of life. This study aimed to evaluate functional outcomes following primary resection of intracranial malignancies, in a single, busy tertiary neurosurgical centre.

Methods: Histologically confirmed intracranial malignancies managed operatively between July 2012 and July 2014 were extracted retrospectively. Case details were collated from multidisciplinary team notes and the Welsh cancer information system (CaNIS). Functional status was assessed using WHO performance status scores.

Results: 77 patients underwent resection (42:35, F:M). 97% had a single tumour. 96% had a Glasgow Coma Scale score of 14 or higher on admission. 36% were ASA grades III-IV. Glioblastoma multiforme was the most common histology (64%). 34% were of metastatic origin. Mean length of post-

operative stay was 6.7 days (range 2–33). Despite initial deterioration in post-operative performance status scores, by discharge, 29% of patients had an improved functional status, with only 6% scoring below preoperative baseline. 4 patients were readmitted and 1 patient was re-operated. There was no mortality recorded.

Conclusion: Primary resection of high grade cerebral neoplasms conveys a functional benefit in a select patient cohort.

0519: CONSENT IN NEUROSURGERY

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Aim: To identify what proportion of legal claims submitted to a neurosurgical unit indicate problems with informed consent and detect deficiencies within the informed consent process.

Methods: Retrospective review of neurosurgical claims provided by the medico-legal department over the past 10 years. Prospective completion of an audit cycle assessing the documentation of consent forms against GMC guidelines. This included; admission type, patient identifiers, responsible consultant, grade of clinician completing the form, proposed procedure, benefits and risks, Jehovah's witness status and provision of informative leaflets.

Results: 36. 56% (20) of claims made to the neurosciences department were neurosurgical. 40% (8) of those highlighted issues around consent (7 spinal, 1 cranial case). Reasons for claims included no clinical improvement (44%), new deficit (22%), haematoma formation (11%), wound infection (11%) and a delay in surgery (11%). On audit of consent forms only 35% (7) had documentation of procedure information provided.

Conclusion: Many patients sign the consent form without fully understanding the procedure, purpose, risks and its alternatives. For better medico-legal defence, written documentation is necessary to indicate that the patient has fully understood the relevant information for the consent process. Consequently, reform of the provision of patient information material is ongoing.

0535: HYPONATRAEMIA IN NEUROSURGICAL PATIENTS, AUDIT AND CREATION OF A CLINICAL TOOL

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Aim: Hyponatraemia in neurosurgical patients is a common and life-threatening condition, the management of which is anecdotally non-standardised. Our aim was to improve the management of hyponatraemia by the development of a treatment decision aid based on new European guidelines.

Methods: Six months of subarachnoid haemorrhage patients (118) admitted to a large neurosurgical unit were retrospectively audited regarding the diagnosis and subsequent management of hyponatraemia. Telephone interviews were conducted with major neurosurgical units in the UK to investigate if a clinical tool or local guidelines are used for the management of hyponatraemia.

Results: Of the subarachnoid haemorrhage patients audited, 28% became hyponatraemic. Of those patients, 24% did not have daily serum sodium testing and 24% never had assessment of serum and urine paired osmolality, failing the European recommendations. No major UK neurosurgical units have guidelines or a standardised, evidence-based approach to diagnosing and managing hyponatraemia.

Conclusion: Hyponatraemia is common and dangerous, but there is no agreed systematic approach taken to its management in UK neurosurgical units. Local data suggest there is a need for a more rigorous approach to managing these patients. A unique treatment decision aid based on European guidelines has been designed and is being implemented locally.

0608: SIX SIGMA APPROACH TO THE INTRODUCTION OF BOARD ROUNDS IN A NEUROSURGICAL DEPARTMENT

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